

**Embue** provides a holistic building intelligence solution at **Franklin Highlands** 

"Our goal is to keep our residents healthy and comfortable first, and to save energy. **Embue helps us do all three and more.**"

Michael Frazier Partner, VP, Director of Facilities Maloney Properties, Inc.

## **About Franklin Highlands**

- · Affordable housing
- 273 units, 23 buildings, 14 boiler rooms
- · No thermostatic control
- · Owner-paid heating costs
- 1.5 miles to walk the property
- Part of \$37M financed renovation

## Goals

- · Make staff more productive
- · Reduce energy costs
- Improve resident comfort

## **Challenges**

- Chronic overheating temps as high as 85F
- · Low humidity below 20% humidity in winter
- Maintenance staff managing a large and geographically dispersed property.

## **Embue**

- Smart thermostats control new zone valves
- · Central equipment monitoring
- Boiler and building pump analytics and alerts
- Thermostat setpoint limits and lockouts
- · Sensors for construction monitoring
- · In-apartment temperature and humidity monitoring
- Whole property view, control and automation

**Franklin Highlands is located in Boston's** Dorchester and Roxbury neighborhoods and encompasses multiple mid-rise buildings with 1-4 bedroom units.

Maloney Properties partnered with MassHousing and the Franklin Park Development Tenants Association to perform an extensive \$32 million renovation to improve building fabric and systems, including exterior and interior work, window repair and replacement, HVAC and electrical upgrades, and an expanded community center.

**Embue cost less than 0.5% of the entire renovation project,** yet provides lasting benefits to residents, staff and the property owner.

**Embue delivered immediate value,** identifying issues with misconfigured boilers and outdoor temperature sensors that were causing excessive energy usage, especially during shoulder seasons. Outdoor temperature sensors were affected by sunlight and placement by boiler flue pipes, which caused the boilers to underproduce heat on cold days. Data from Embue was also used to ensure that the system itself was properly installed and optimized.

**Maintenance staff is now more productive,** with a holistic, accurate view of building systems and performance propertywide. Staff no longer have to walk the property to investigate every issue and can monitor and control systems via smart phone or desktop.

**Resident comfort has been improved,** with more cost efficient, consistent temperature delivery through in-unit thermostats and humidity monitoring and setpoint limits and lockouts monitored by maintenance staff.

